

Influence Of Occupational Safety and Occupational Health On Employee Performance Of Pt. Laut Timur Utama Durjela Village, Aru Pulau District, Aru Islands Regency

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ABSTRACT

This research was conducted at PT. Laut Timur Utama, Durjela Village, Pulau-Pulau Aru District, Aru Islands Regency. This study aims to: (1) analyze the effect of Occupational Safety and Health on Employee Performance of PT. Laut Timur Utama, and (2) identify variables that have a dominant influence on Employee Performance. The research method used is quantitative with a sample of 40 respondents. Data analysis includes validity testing, reliability testing, model testing, multiple linear regression analysis, and hypothesis testing with the SPSS program. The results of the regression analysis produce the following equation: $Y = 2.587 + 0.336X_1 + 0.411X_2 + e$. The results of the study indicate that Occupational Safety and Health has a positive and significant effect on Employee Performance. The Occupational Safety (X_1) and Occupational Health (X_2) variables together contribute 70.3% to Employee Performance (Y), while 29.7% is influenced by other variables not included in this study.

Keywords: Occupational Safety, Occupational Health, Performance

INTRODUCTION

PT. Laut Timur Utama Durjela Village, Aru Island District, Aru Islands Regency, is a company engaged in the fish processing industry, its main product is canned fish. (Dharma, 2009) states that manager performance measurement can be seen from a number of variables. One of them is the level of employee safety and health or the number of accidents committed by employees. A safe workplace makes workers feel healthier and more productive. Unsafe work environment factors can also include excessive pressure on work schedules, lack of adequate safety equipment and tools, lack of safety training, and lack of supervision of safety.

Occupational safety is safety related to human work activities in the industrial, manufacturing and construction sectors, which includes machines, equipment, material handling, steam engines, pressure vessels, raw material work tools and their processing processes, workplace foundations and their environment, and work methods. (Mangkunegara, 2011).

The main provisions regarding labor protection are contained in Law no. 14 of 1969 and Law no. 1 of 1970 which was updated in Article 86 paragraph 1 of Law No. 13 of 2003 which states that every worker/laborer has the right to obtain protection for:

- a Occupational Health and Safety



- b. Morals and morality
- c. Treatment that is in accordance with human dignity and religious values (Husni, 2009).

According to (Cintya et al., 2021), Occupational Safety and Health (K3) is a program created by the government and must be followed by employers and workers to prevent accidents and occupational diseases by recognizing things that have the potential to cause them and taking preventive measures when they occur. The goal is to make the workplace more comfortable and healthy so that the risk of accidents and diseases can be minimized.

Based on the results of observations conducted at the research site on work safety, it is known that the company has established a work safety program for production employees, such as providing work safety equipment for production employees including safety shoes, helmets, glasses, gloves and so on. However, there are still work accidents that occur in the workplace, which cause production disruptions due to loss of working hours, and decreased employee performance. Table 1 shows the work accident report of PT Laut Timur Utama, Durjela Village, Pulau Aru District, Aru Islands Regency in 2022–2024.

Table 1
Employee Work Accident Report

No	Year	Number of Serious Accidents (Person)	Number of Minor Accidents (Person)	Total
1	2022	12	8	19
2	2023	7	15	22
3	2024	10	7	17

Source: Personnel PT. Laut Timur Utama

Table 1 shows the annual increase in the number of work accidents and minor accidents at PT. Laut Timur Utama, Durjela Village, Aru Island District, Aru Islands Regency. One of the phenomena related to work safety is the lack of company socialization about the importance of personal protective equipment for employees, making it difficult for them to build a good work safety culture. In addition, the company does not carry out sufficient supervision of employees, so employees are free to choose whether or not to use the personal protective equipment provided by the company in the workplace.

The company PT. Laut Timur Utama in Durjela Village, Aru Island District, Aru Islands Regency also faces the problem of work accidents. There are no strict sanctions or penalties for employees who do not wear personal protective equipment, so employees use personal protective equipment carelessly, which can cause work accidents and reduce company performance. An employee of the personnel department of PT Laut Timur Utama in Durjela Village, Aru Island District, Aru Islands Regency, said that unsafe behavior by workers included not using Personal Protective Equipment (PPE), not following Standard Operating Procedures (SOP), and not being careful when working, because this industry is labor-intensive and most of its employees are uneducated, implementing safety in the company is not easy.

Employee health issues are very important because they greatly affect how healthy employees are and how well they perform their duties. If employee health is

perfect, meaning they are not sick, then work accidents can be reduced. Therefore, companies must pay more attention to employee conditions while they are working, especially related to their safety and health. Occupational health in a company is a specialization in health science and its practice by conducting assessments of factors that cause disease in the company's work environment through measurements, the results of which are used as a basis for corrective action, so that workers and the community around the company are protected from work-related hazards, and it is possible to achieve the highest level of health (Sabir, 2011).

In terms of occupational health, PT Laut Timur Utama Durjela Village, Aru Island District, Aru Islands Regency shows the company's lack of attention to its employees' health. Production employees do not exercise every morning to prevent disease, and the company also does not conduct regular health checks.

According to Erickson (2014) defines occupational health as a health condition that aims for workers to obtain the highest level of health, both physically, mentally and socially, with prevention and treatment of diseases or health disorders caused by work and the work environment or general diseases. One of the preventions of physical illness that can be done by the company is routine health checks on employees and the need to hold morning exercise for employees as a prevention of disease.

THEORY

A. Safety

According to (Suma'mur, 2009) "Occupational safety is a series of efforts to create a safe and peaceful working environment for employees working in the company concerned."

B. Health

According to (Husni, 2009) Occupational health is a part of health science that aims to ensure that workers achieve perfect health, both physically, mentally and socially.

C. Employee performance

According to (Rivai, 2013), performance is the result or level of success of a person as a whole during a certain period in carrying out tasks compared to various possibilities, such as work result standards, targets or goals or criteria that have been determined in advance and agreed upon together.

Relationship Between Variables

The Impact of Safety on Employee Performance

Occupational safety is when employees feel safe and comfortable with the treatment of their environment, which has an impact on the quality of their work. Feeling comfortable in the workplace begins with whether employees are comfortable with the work safety equipment, the equipment used, the layout of the workspace, and the workload given. Dharma (2009) stated that factory managers can measure their performance based on several factors, such as the level of employee occupational safety and health or the number of accidents committed by employees. In conclusion, occupational safety is an important component in the workplace and has an impact on employee performance. Research results (Dewi, 2008) in the thesis entitled "The Influence of Occupational Health and Safety (K3) on Employee Performance at PT. Ecogreen Oleochemicals Medan Plant" shows that occupational safety has a positive and significant impact on employee performance. There is a regression coefficient of 0.306 and a t-value of 3.770, with a significance level of 0.001.

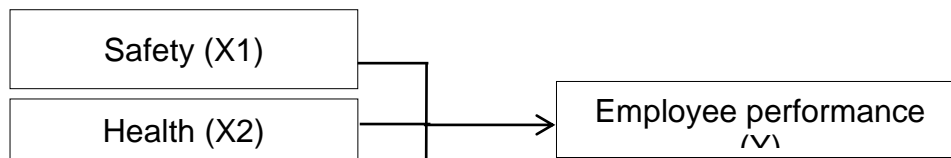
The Impact of Health on Employee Performance

According to Soepomo (2009) Occupational health is the rules and efforts to protect workers from labor incidents or conditions that are detrimental to health and morality in a person carrying out work in an employment relationship. According to (Suma'mur, 2009) that in achieving employee performance, an occupational safety and health program is required, with the following functions: (1) protecting employees from conditions that endanger occupational safety and health, (2) helping employees adjust mentally/physically so that employees are healthy and productive, (3) helping to achieve and maintain the highest level of physical and mental health and employee performance.

Research conducted by Indiasari (2015) entitled "The Influence of Occupational Health and Safety on Employee Performance in the Production Division of PT. Surabaya Agung Industri Pulp & Kertas" shows that occupational health has a positive and significant influence with a regression coefficient value of 0.230 and has a t count of 2.382 with a significance level of 0.021.

The following conceptual framework explains the relationship between the dependent and independent variables of the study:

Figure 1
Framework of Thought



Source: Theoretical Basis

Based on the conceptual framework above, the research hypothesis is as follows:

1. Occupational Safety and Health have a positive and significant effect on the performance of employees of PT. Laut Timur Utama, Durjela Village, Aru Island District, Aru Islands Regency.

Occupational Health has a significant and dominant influence on the performance of employees of PT. Laut Timur Utama, Durjela Village, Aru Island District, Aru Islands Regency..

METHOD

In this study, the population referred to or used is all employees of PT. Laut Timur Utama Durjela Village, Pulau Aru District, Aru Islands Regency, with a total of 40 respondents. The researcher used a census sampling method by using all members of the population as samples.

The use of multiple linear regression as an analysis model requires the fulfillment of several basic assumptions, namely as follows:

Multicollinearity, Heteroscedasticity, Normality. The multiple regression equation formula used in this study is as follows: The independent variables (X) are Safety (X1) and Health (X2), while the dependent variable is Employee Performance (Y). The purpose of using multiple linear regression in this study is to reduce the value of the dependent variable that is influenced by the value of the independent variable (Azuar Juliandi, 2014)

$$Y = a + b_1X_1 + b_2 X_2$$

Information :

Y = Employee Performance

a = Regression Equation Constant

b1 = Regression Coefficient of Variable X1 (Safety)

b2 = Regression Coefficient of Variable X2 (Health)

X1 = Safety

X2 = Health

RESULTS AND DISCUSSION

A. Results

1. Validity Test

The results of the validity test are presented in the following table:

Table 2. Validity Test Results				
Variables	Item	Correlation Product Moment	Rtable ($\alpha=0.05$)	Caption
Safety (X1)	P1	0.864 0.839	0.312	Valid
	P2	0.704 0.749		Valid
	P3	0.567 0.827		Valid
	P4	0.802 0.477		Valid
	P5	0.696 0.437		Valid
	P6	0.789 0.736		Valid
	P7	0.367 0.569		Valid
	P8			Valid
	P9			Valid
	P10			Valid
	P11			Valid
	P12			Valid
	P13			Valid
	P14			Valid
Health (X2)	P1	0.896 0.896	0.312	Valid
	P2	0.595 0.853		Valid
	P3	0.559 0.844		Valid
	P4	0.816 0.885		Valid
	P5			Valid
	P6			Valid
	P7			Valid
	P8			Valid

Performance (Y)	P1	0.764	0.325	Valid
	P2	0.813		Valid
	P3	0.636		Valid
	P4	0.469		Valid
	P5	0.878		Valid
	P6	0.704		Valid
	P7	0.807		Valid
	P8	0.426		Valid
	P9	0.686		Valid

Source: SPSS Output Data, 2025

The results of the validity test presented in Table 2 show that the correlation coefficient value, or *r*count, is greater than the correlation value, or *r*table. Therefore, these statements can be used for further analysis of this study.

2. Data Reliability Test

The results of the reliability test of the variables used in this study are presented in Table 3 below:

Table 3. Reliability Test Results

Variables	Cronbach's Alpha	r table	Information
Occupational Safety (X1)	0.907	0.60	Reliable
Occupational Health (X2)	0.914	0.60	Reliable
Performance (Y)	0.858	0.60	Reliable

Source: SPSS Output Data, 2025

Based on the results of the reliability test shown in the table above, it can be concluded that if the reliability value for each variable is greater than 0.60, the instrument used is considered reliable. Therefore, these items are worthy of use as a measure.

3. Classical Assumption Test

1. Multicollinearity Test

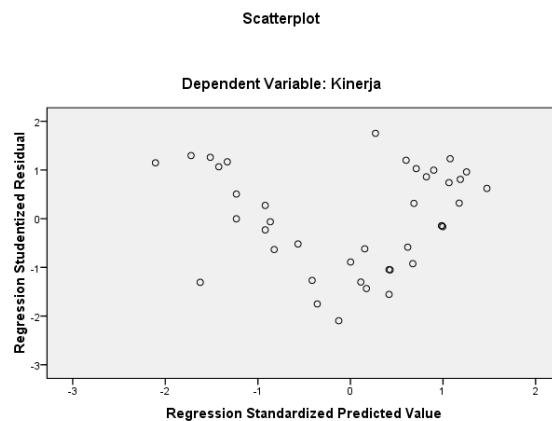
**Table 4
Multicollinearity Test**

Variables	Mark		Status
	Tolerance	VIF	
Occupational Safety (X1)	0.326	3,063	FreeMulticollinearity
Occupational Health (X2)	0.326	3,063	

Source: SPSS Output Appendix

The table above shows that the independent variables in this study are not subject to the classical assumption of multicollinearity, because the tolerability value is greater than 0.1 and the value of the influence factor variable is less than 10.

2. Heteroscedasticity Test



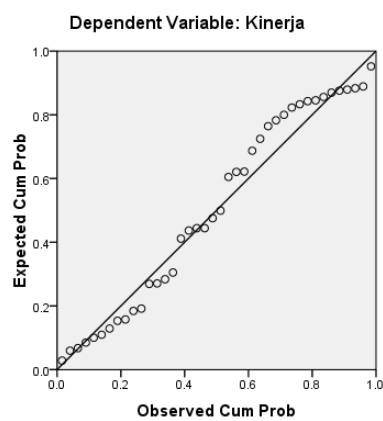
Source: SPSS Output Appendix

Figure 1. Heteroscedasticity Test Results

The image above shows that the distribution pattern of the plot on the graph has a wavy, widening pattern, and the plot spreads above and below the number 0 on the Y axis. This means that all research variables used in this study are not affected by the heteroscedasticity assumption.

3. Normality Test

Normal P-P Plot of Regression Standardized Residual



Source: SPSS Output Appendix

Figure 2.
Data Normality Test Results

The pattern of the plots is around the diagonal line of the PP Plot Graph, as shown above. This pattern indicates that the data from each variable involved in this study is normally distributed, or not affected by the assumption of data normality.

4. Multiple Linear Regression Analysis

The multiple linear regression equation is as follows:

$$Y = a + b_1X_1 + b_2X_2 + e$$

$$Y = 2.587 + 0.336X_1 + 0.411X_2 + e$$

1. Constant (α) = 2.587, which shows that the level of performance variable (Y) of PT. Laut Timur Utama, Durjela Village, Aru Island District, Aru Islands Regency is 2.587 if the Occupational Safety and Health variable is considered constant.
2. The coefficient b_1 (X_1) = 0.336 shows that the Work Safety variable has a positive effect on performance, or if the Work Safety variable increases, employee performance will increase by 0.336.
3. The coefficient b_2 (X_2) = 0.411 shows that the Occupational Health variable has a positive effect on performance, or if the Occupational Health variable increases, employee performance will increase by 0.411.

5. Hypothesis Testing

Simultaneous Significance Test (F-Test)

At PT. Laut Timur Utama in Durjela Village, Pulau Aru District, Aru Islands Regency, this test was conducted to evaluate the positive and significant relationship between the independent variables (X_1 , X_2) Occupational Safety and Health and the dependent variable (Y) Employee Performance. Based on the results of the simultaneous F test, it can be concluded that the independent variables of Occupational Safety (X_1) and Occupational Health (X_2) together have a positive and significant effect on the employee performance variable of PT Laut Timur Utama, Durjela Village, Aru Island District, Aru Islands Regency (Y). Thus, the Fcount value is greater than Ftable (43.816 > 3.23) and the significance level is lower than 0.05 with the hypothesis H_0 rejected and H_a accepted.

Partial Significance Test (t-Test)

Based on the test results, it can be seen that:

1. The Occupational Safety variable is 3.023 with a significance level of 0.005 and the ttable value at α 5% is 1.684. The Occupational Safety variable has a positive and significant effect on employee performance at PT. Laut Timur Utama, Durjela Village, Aru Island District, Aru Islands Regency. This can be seen from the significance value of 0.005 < 0.05 and the tcount value (3.023) > ttable 1.684, meaning that if the Occupational Safety variable is not maximized properly, it is likely to affect employee performance.
2. Occupational Health variable is 2,581 with a significance level of 0.014 and the ttable value at α 5% is 1,684. Occupational Health variable partially has a positive and significant effect on the Performance of employees of PT. Laut Timur Utama, Durjela Village, Aru Island District, Aru Islands Regency. This can be seen from the significance value of 0.014 < 0.05 and the tcount value (2,581) > ttable (1,684) meaning that if Occupational Health is not maximized properly, it is likely to affect employee Performance.

Determination Coefficient Test (R²-Test)

The determination coefficient test is used to measure how much the independent variable (Occupational Safety and Occupational Health) contributes to the dependent variable (Employee Performance). The determination coefficient ranges from zero to one ($0 \leq R^2 \leq 1$). If R^2 is greater or closer to one, then it can be said that the influence of the independent variable (X_1), namely Occupational Safety, (X_2), namely Occupational Health is large on the dependent variable (Y), namely Employee Performance. This means that the model used is stronger to explain the influence of the independent variable on the dependent variable and vice versa. The results of the determination coefficient test using SPSS for windows can be seen in the R Square value of 0.703, meaning that 70.3% of the Performance factors can be explained by the Occupational Safety (X_1) and Occupational Health (X_2) variables. While the remaining 60.3% can be explained by other factors not examined in this study.

DISCUSSION

The Influence of Occupational Safety on Employee Performance

The results of the partial test (t-test) show that work safety has a significant positive influence on employee performance. PT. Laut Timur Utama, Durjela Village, Aru Island District, Aru Islands Regency. This shows that the less than optimal work safety program provided by the company can affect employee performance. Less than optimal work safety provided by the company will indeed have a negative impact on employee performance itself, this has significant results on employee performance at PT. Laut Timur Utama, Durjela Village, Aru Island District, Aru Islands Regency.

On the other hand, if the company is able to maximize a good occupational safety system, this can positively help them in producing good performance. According to Simamarta et al. (2022) stated that K3 is an effort or thought and its application aimed at ensuring the integrity and perfection of both the physical and spiritual workforce, in particular, and humans in general, the results of work and culture, to improve the welfare of the workforce.

This is reinforced by Government Regulation No. 50 of 2012. This regulation emphasizes that companies are required to ensure that all workers use PPE according to established standards and to take strict action against workers who do not comply with safety regulations.

The results of this study support previous research conducted by (Indiasari, 2015). In his research, it was stated that the higher the level of work safety, the higher the employee performance. Work safety programs can reduce the risk of work accidents, where work accidents can disrupt the production process.

The Influence of Occupational Health on Employee Performance

The results of the partial test (t-test) show that occupational health has a significant positive influence on employee performance. PT. Laut Timur Utama, Durjela Village, Aru Island District, Aru Islands Regency.

The results of this study explain that occupational health has a positive and significant effect on employee performance, these results have the same results as the research of Herizal and Wulandari (2020), Hidayati (2022), Basri et al. (2021) which were able to prove that occupational health has a positive and significant effect on employee performance, the higher the occupational health program carried out by the company, the higher the employee performance.

The Influence of Occupational Safety and Health on Employee Performance

Based on the simultaneous hypothesis test (F) that has been conducted, it shows that Occupational Safety and Health together have a positive and significant effect on Employee Performance. So it can be said that if the company improves the occupational safety and health program, it can improve employee performance.

According to Mathis and Jackson (2020) Performance is the result of work related to the tasks and responsibilities of individuals in an organization that can be measured based on certain standards. Many factors affect employee performance, in this case employee safety and health.

In terms of occupational safety, companies are required to be able to provide good and maximum safety programs, provide proper personal protective equipment, the need for strict supervision and sanctions for violators of occupational safety, and the need for socialization that explains work methods and occupational safety instructions, which are useful for employees as a fosterer of occupational safety culture for employees. Then in terms of occupational health, companies must also be able to provide good and planned occupational health programs that can reduce or eliminate occupational diseases, in this case, namely the disposal of company waste or garbage that can interfere with employee work, periodic health checks must be carried out by the company as a prevention against diseases that will arise. Recreational opportunities and sports facilities must also be maximized by the company, as an effort to foster a healthy life for employees.

The results of this study are in accordance with research by Kurniawan (2014), Christianti (2016), Indiasari (2015) and Dewi's research (2012) which states that Occupational Safety and Health has a positive and significant influence on employee performance..

CONCLUSIONS

Overall, the Occupational Safety and Health variable is proven to have a significant influence on employee performance at PT. Laut Timur Utama, Durjela Village, Pulau Aru District, Aru Islands Regency. Of the two independent variables studied, Occupational Health is the most dominant factor in influencing employee performance. The results of the study showed that 70.3% of employee performance variations can be explained by the Occupational Safety and Health variable, while the remaining 29.7% is influenced by other factors not analyzed in this study, such as work stress, work environment, and other factors.

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